AMENDMENTS TO THE CLAIMS

1.-25. (**Canceled**)

26. (**Original**) A method for controlling pests, said method comprising exposing said pests to a pest-controlling effective amount of a compound of formula (I) or a tautomer thereof or a composition comprising at least one compound of formula (I) or a tautomer thereof:

$$R_1$$
 R_2
 R_3
 R_3
 R_4
 R_5
 R_5
 R_5
 R_5
 R_5

wherein:

X is selected from O, S or N-R₄;

when $\underline{\hspace{0.5cm}}$ is a single bond attached to Y, Y is selected from the group consisting of H, $[C(R_7)_2]_n$ halo, $[C(R_7)_2]_n$ OR₅, $[C(R_7)_2]_n$ SR₅, $[C(R_7)_2]_n$ (C=O)R₆, $[C(R_7)_2]_n$ (C=S)R₆, $[C(R_7)_2]_n$ N(R₄)₂, $[C(R_7)_2]_n$ (C=NR₄)R₆, $[C(R_7)_2]_n$ NO₂ and $[C(R_7)_2]_n$ NR₄OR₈;

when ____ is a double bond attached to Y, Y is O;

when $\frac{-----}{C_{10}}$ is a single bond attached to R_1 , R_1 is selected from the group consisting of H, OH, SH, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_2 - C_{10} alkynyl, C_6 - C_{10} aryl, C_7 - C_{12} arylalkyl, C_8 - C_{13} arylalkenyl, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkenyl, C_4 - C_{10} cycloalkylalkyl, C_4 - C_{10} cycloalkenylalkyl, C_3 - C_{10} heterocyclyl, C_4 - C_{12} heterocyclylalkyl, C_5 - C_{13} heterocyclylalkenyl, C_1 - C_{10} alkoxy, C_2 - C_{10} alkenyloxy, C_1 - C_{10} alkylthio, C_2 - C_{10} alkenylthio, $[C(R_7)_2]_n$ halo, $[C(R_7)_2]_n(C=O)R_6$, $[C(R_7)_2]_n(C=S)R_6$, $[C(R_7)_2]_nN(R_4)_2$, $[C(R_7)_2]_n(C=NR_4)R_6$, $[C(R_7)_2]_nNO_2$ and $[C(R_7)_2]_nNR_4OR_8$;

when $\underline{\text{-----}}$ is a double bond attached to R_1 , R_1 is $CR_{1a}R_{1b}$ wherein R_{1a} and R_{1b} are independently selected from C_1 - C_{10} alkyl;

 R_2 and R_3 are independently selected from the group consisting of H, OH, SH, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_2 - C_{10} alkynyl, C_6 - C_{10} aryl, C_7 - C_{12} arylalkyl, C_8 - C_{13} arylalkenyl, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkenyl, C_4 - C_{10} cycloalkenyl, C_4 - C_{10} cycloalkenyl, C_3 - C_{10} heterocyclyl, C_4 - C_{12} heterocyclylalkyl, C_5 - C_{13} heterocyclylalkenyl, C_1 - C_{10} alkoxy, C_2 - C_{10} alkenyloxy, C_1 - C_{10}

alkylthio, C_2 - C_{10} alkenylthio, $[C(R_7)_2]_n$ halo, $[C(R_7)_2]_n(C=O)R_6$, $[C(R_7)_2]_n(C=S)R_6$, $[C(R_7)_2]_nN(R_4)_2$, $[C(R_7)_2]_n(C=NR_4)R_6$, $[C(R_7)_2]_nNO_2$ and $[C(R_7)_2]_nNR_4OR_8$;

each R_4 is independently selected from the group consisting of H, OH, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_6 - C_{10} aryl, C_7 - C_{12} arylalkyl, C_8 - C_{13} arylalkenyl, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkenyl, C_4 - C_{10} cycloalkylalkyl, C_3 - C_{10} heterocyclyl, C_4 - C_{12} heterocyclylalkyl, C_5 - C_{13} heterocyclylalkenyl, C_1 - C_{10} alkoxy and C_2 - C_{10} alkenyloxy;

 R_5 is selected from the group consisting of H, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_6 - C_{10} aryl, C_7 - C_{12} arylalkyl, C_8 - C_{13} arylalkenyl, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkenyl, C_4 - C_{10} cycloalkylalkyl, C_3 - C_{10} heterocyclyl, C_4 - C_{12} heterocyclylalkyl, C_5 - C_{13} heterocyclylalkenyl, (C=O) R_6 , PO_3R_8 , SO_3R_8 and SO_2R_8 ;

 R_6 is selected from the group consisting of H, OH, C_1 - C_{10} alkoxy, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyloxy, C_2 - C_{10} alkenyl, C_6 - C_{10} aryloxy, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkenyl, C_3 - C_6 cycloalkyloxy, C_3 - C_6 cycloalkenyloxy, C_3 - C_{10} heterocyclyl, C_3 - C_{10} heterocyclyloxy, C_1 - C_{10} alkenylthio, C_1 - C_{10} alkenylthio, C_6 - C_{10} arylthio, C_3 - C_6 cycloalkylthio, and C_3 - C_{10} heterocyclylthio;

 R_7 is selected from the group consisting of H, halogen, OR_5 , SR_5 , $N(R_4)_2$, $(C=O)R_6$, $(C=S)R_6$, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_6 - C_{10} aryl, C_3 - C_{10} heterocyclyl, C_3 - C_6 cycloalkyl, C_7 - C_{12} arylalkyl, C_4 - C_{12} heterocyclylalkyl, C_4 - C_{10} cycloalkylalkyl, C_8 - C_{13} arylalkenyl, C_5 - C_{13} heterocyclylalkenyl, and NO_2 ;

 R_8 is selected from the group consisting of H, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_6 - C_{10} aryl, C_7 - C_{12} arylalkyl, C_8 - C_{13} arylalkenyl, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkenyl, C_4 - C_{10} cycloalkylalkyl, C_5 - C_{10} cycloalkylalkenyl, C_3 - C_{10} heterocyclyl, C_4 - C_{12} heteocyclylalkyl and C_5 - C_{13} heterocyclylalkenyl;

n is 0 or an integer selected from 1 to 5;

wherein each alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl and heterocyclyl group is optionally substituted.

27. (Currently amended) A method according to claim <u>26</u>3 wherein the compound of formula (I) is a compound of formula (II):

$$R_1$$
 R_2
 R_3
 R_3
 R_1
 R_2
 R_3
 R_3
 R_4
 R_5

wherein:

X is selected from the group consisting of O, S or N-R₄;

Y is selected from the group consisting of H, $[C(R_7)_2]_n$ halo, $[C(R_7)_2]_n$ OR₅, $[C(R_7)_2]_n$ SR₅, $[C(R_7)_2]_n$ (C=O)R₆, $[C(R_7)_2]_n$ (C=S)R₆, $[C(R_7)_2]_n$ N(R₄)₂, $[C(R_7)_2]_n$ (C=NR₄)R₆, $[C(R_7)_2]_n$ NO₂ and $[C(R_7)_2]_n$ NR₄OR₈;

 R_1 , R_2 and R_3 are independently selected from the group consisting of H, OH, SH, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_2 - C_{10} alkynyl, C_6 - C_{10} aryl, C_7 - C_{12} arylalkyl, C_8 - C_{13} arylalkenyl, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkenyl, C_4 - C_{10} cycloalkylalkyl, C_4 - C_{10} cycloalkenylalkyl, C_3 - C_{10} heterocyclyl, C_4 - C_{12} heterocyclylalkyl, C_5 - C_{13} heterocyclylalkenyl, C_1 - C_{10} alkoxy, C_2 - C_{10} alkenyloxy, C_1 - C_{10} alkylthio, C_2 - C_{10} alkenylthio, $[C(R_7)_2]_n$ halo, $[C(R_7)_2]_n$ (C=O) R_6 , $[C(R_7)_2]_n$ (C=S) R_6 , $[C(R_7)_2]_n$ N(R_4)2, $[C(R_7)_2]_n$ (C=NR4) R_6 , $[C(R_7)_2]_n$ NO2 and $[C(R_7)_2]_n$ NR4OR8;

each R_4 is independently selected from the group consisting of H, OH, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_6 - C_{10} aryl, C_7 - C_{12} arylalkyl, C_8 - C_{13} arylalkenyl, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkenyl, C_4 - C_{10} cycloalkylalkyl, C_3 - C_{10} heterocyclyl, C_4 - C_{12} heterocyclylalkyl, C_5 - C_{13} heterocyclylalkenyl, C_1 - C_{10} alkoxy and C_2 - C_{10} alkenyloxy;

 R_5 is selected from the group consisting of H, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_6 - C_{10} aryl, C_7 - C_{12} arylalkyl, C_8 - C_{13} arylalkenyl, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkenyl, C_4 - C_{10} cycloalkylalkyl, C_3 - C_{10} heterocyclyl, C_4 - C_{12} heterocyclylalkyl, C_5 - C_{13} heterocyclylalkenyl, $(C=0)R_6$, PO_3R_8 , SO_3R_8 and SO_2R_8 ;

 R_6 is selected from the group consisting of H, OH, C_1 - C_{10} alkoxy, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyloxy, C_2 - C_{10} alkenyl, C_6 - C_{10} aryloxy, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkenyl, C_3 - C_6 cycloalkyloxy, C_3 - C_6 cycloalkenyloxy, C_3 - C_{10} heterocyclyl, C_3 - C_{10} heterocyclyloxy, C_1 - C_{10} alkenylthio, C_1 - C_{10} alkenylthio, C_6 - C_{10} arylthio, C_3 - C_6 cycloalkylthio, and C_3 - C_{10}

heterocyclylthio;

 R_7 is selected from the group consisting of H, halogen, OR_5 , SR_5 , $N(R_4)_2$, $(C=O)R_6$, $(C=S)R_6$, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_6 - C_{10} aryl, C_3 - C_{10} heterocyclyl, C_3 - C_6 cycloalkyl, C_7 - C_{12} arylalkyl, C_4 - C_{12} heterocyclylalkyl, C_4 - C_{10} cycloalkylalkyl, C_8 - C_{13} arylalkenyl, C_5 - C_{13} heterocyclylalkenyl, and NO_2 ;

 R_8 is selected from the group consisting of H, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_6 - C_{10} aryl, C_7 - C_{12} arylalkyl, C_8 - C_{13} arylalkenyl, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkenyl, C_4 - C_{10} cycloalkylalkyl, C_5 - C_{10} cycloalkylalkenyl, C_3 - C_{10} heterocyclyl, C_4 - C_{12} heteocyclylalkyl and C_5 - C_{13} heterocyclylalkenyl;

n is 0 or an integer selected from 1 to 5;

----- represents a single or double bond; and

wherein each alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl and heterocyclyl group is optionally substituted.

- 28. (Canceled)
- 29. (Currently amended) A method according to claim <u>26</u>3, wherein at least one compound of formula (I) is a compound of formula (III):

$$R_{11}$$
 R_{12}
 R_{13}
 R_{11}
 R_{12}
 R_{13}
 R_{11}

wherein

 R_{11} is selected from the group consisting of C_2 - C_{10} alkenyl, C_7 - C_{12} arylalkyl, C_6 - C_{12} heteroarylalkyl and C_2 - C_{10} alkenyloxy wherein each C_2 - C_{10} alkenyloxy is optionally substituted with 1 to 3 halo, hydroxy, thiol or nitro groups; and

 R_{12} and R_{13} are independently selected from the group consisting of H, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_2 - C_{10} alkynyl, C_6 - C_{10} aryl, C_7 - C_{12} arylalkyl, C_3 - C_{10} cycloalkyl, C_5 - C_{10} heteroaryl, C_6 - C_{12} heteroarylalkyl and C_1 - C_{10} alkoxy, wherein each C_1 - C_{10} alkyl and C_1 - C_{10} alkoxy is optionally substituted with 1 to 3 halo, hydroxy, thiol or nitro groups.

- 30. (Currently amended) A method according to claim $\underline{295}$, wherein R_{11} is C_2 - C_{10} alkenyl optionally substituted with a hydroxy, nitro or thiol group or 1 to 3 halo groups, and R_{12} and R_{13} are independently selected from C_1 - C_{10} alkyl optionally substituted with a hydroxy, nitro or thiol group or 1 to 3 halo groups.
- 31. (Currently amended) A method according to claim <u>263</u> wherein at least one compound of formula (I) is eremophilone.
 - 32. (Canceled)
- 33. (Currently amended-Withdrawn) A method according to claim <u>26</u>3 wherein at least one compound of formula (I) is a compound of formula (IV):

$$R_{21}$$
 R_{22}
 R_{23}
 R_{23}
 R_{24}
 R_{25}
 R_{25}
 R_{25}
 R_{25}
 R_{25}
 R_{25}

wherein R_{21} , R_{22} and R_{23} are independently selected from the group consisting of H, OH, SH, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_2 - C_{10} alkynyl, C_6 - C_{10} aryl, C_7 - C_{12} arylalkyl, C_8 - C_{13} arylalkenyl, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkenyl, C_4 - C_{10} cycloalkylalkyl, C_4 - C_{10} cycloalkenylalkyl, C_3 - C_{10} heterocyclyl, C_4 - C_{12} heterocyclylalkyl, C_5 - C_{13} heterocyclylalkenyl, C_1 - C_{10} alkoxy, C_2 - C_{10} alkenyloxy, C_1 - C_{10} alkylthio, C_2 - C_{10} alkenylthio, $[C(R_7)_2]_n$ halo, $[C(R_7)_2]_n(C=O)R_6$, $[C(R_7)_2]_n(C=S)R_6$, $[C(R_7)_2]_nN(R_4)_2$, $[C(R_7)_2]_n(C=NR_4)R_6$, $[C(R_7)_2]_nNO_2$ and $[C(R_7)_2]_nNR_4OR_8$;

each R_4 is independently selected from the group consisting of H, OH, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_6 - C_{10} aryl, C_7 - C_{12} arylalkyl, C_8 - C_{13} arylalkenyl, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkenyl, C_4 - C_{10} cycloalkylalkyl, C_3 - C_{10} heterocyclyl, C_4 - C_{12} heterocyclylalkyl, C_5 - C_{13} heterocyclylalkenyl, C_1 - C_{10} alkoxy and C_2 - C_{10} alkenyloxy;

 R_6 is selected from the group consisting of H, OH, C_1 - C_{10} alkoxy, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyloxy, C_2 - C_{10} alkenyl, C_6 - C_{10} aryloxy, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkenyl,

 C_3 - C_6 cycloalkyloxy, C_3 - C_6 cycloalkenyloxy, C_3 - C_{10} heterocyclyl, C_3 - C_{10} heterocyclyloxy, C_1 - C_{10} alkenylthio, C_1 - C_{10} alkenylthio, C_6 - C_{10} arylthio, C_3 - C_6 cycloalkylthio, and C_3 - C_{10} heterocyclylthio;

 R_7 is selected from the group consisting of H, halogen, OR_5 , SR_5 , $N(R_4)_2$, $(C=O)R_6$, $(C=S)R_6$, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_6 - C_{10} aryl, C_3 - C_{10} heterocyclyl, C_3 - C_6 cycloalkyl, C_7 - C_{12} arylalkyl, C_4 - C_{12} heterocyclylalkyl, C_4 - C_{10} cycloalkylalkyl, C_8 - C_{13} arylalkenyl, C_5 - C_{13} heterocyclylalkenyl, and NO_2 ;

 R_8 is selected from the group consisting of H, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_6 - C_{10} aryl, C_7 - C_{12} arylalkyl, C_8 - C_{13} arylalkenyl, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkenyl, C_4 - C_{10} cycloalkylalkyl, C_5 - C_{10} cycloalkylalkenyl, C_3 - C_{10} heterocyclyl, C_4 - C_{12} heteocyclylalkyl and C_5 - C_{13} heterocyclylalkenyl; and

n is 0 or an integer selected from 1 to 5;

wherein each alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl and heterocyclyl group is optionally substituted.

34. (Currently amended- Withdrawn) A method according to claim $\underline{338}$ wherein R_{21} is selected from the group consisting of C_2 - C_{10} alkenyl, C_7 - C_{12} arylalkyl, C_6 - C_{12} heteroarylalkyl and C_2 - C_{10} alkenyloxy wherein each C_2 - C_{10} alkenyloxy is optionally substituted with 1 to 3 halo, hydroxy, thiol or nitro groups; and

 R_{22} and R_{23} are independently selected from the group consisting of H, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_2 - C_{10} alkynyl, C_6 - C_{10} aryl, C_7 - C_{12} arylalkyl, C_3 - C_{10} cycloalkyl, C_5 - C_{10} heteroaryl, C_6 - C_{12} heteroarylalkyl and C_1 - C_{10} alkoxy, wherein each C_1 - C_{10} alkyl and C_1 - C_{10} alkoxy is optionally substituted with 1 to 3 halo, hydroxy, thiol or nitro groups.

- 35. (Currently amended- Withdrawn) A method according to claim 349 wherein R_{21} is C_2 - C_{10} alkenyl, optionally substituted with a hydroxy, thiol or nitro group or 1 to 3 halo groups, and R_{22} and R_{23} are independently selected from C_1 - C_{10} alkyl, optionally substituted with a hydroxy, thiol or nitro group or 1 to 3 halo groups.
- 36. (**Currently amended- Withdrawn**) A method according to claim <u>26</u>3 wherein at least one compound of formula (I) is 8-hydroxy-1(10)dihydroeremophilone.
 - 37. (Canceled)

38. (Currently amended-Withdrawn) A method according to claim <u>263</u> comprising at least one compound of formula (V):

wherein R_{31} is selected from the group consisting of C_2 - C_{10} alkenyl, C_7 - C_{12} arylalkyl, C_6 - C_{12} heteroarylalkyl and C_2 - C_{10} alkenyloxy wherein each C_2 - C_{10} alkenyloxy is optionally substituted with 1 to 3 halo, hydroxy, thiol or nitro groups; and

 R_{32} and R_{33} are independently selected from the group consisting of H, C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_2 - C_{10} alkynyl, C_6 - C_{10} aryl, C_7 - C_{12} arylalkyl, C_3 - C_{10} cycloalkyl, C_5 - C_{10} heteroaryl, C_6 - C_{12} heteroarylalkyl and C_1 - C_{10} alkoxy, wherein each C_1 - C_{10} alkyl and C_1 - C_{10} alkoxy is optionally substituted with 1 to 3 halo, hydroxy, thiol or nitro groups.

- 39. (Currently amended- Withdrawn) A method according to claim $\underline{3812}$ wherein R_{31} is C_2 - C_{10} alkenyl optionally substituted with a hydroxy, nitro or thiol group or 1 to 3 halo groups, and R_{32} and R_{33} are independently selected from C_1 - C_{10} alkyl optionally substituted with a hydroxy, nitro or thiol group or 1 to 3 halo groups.
- 40. (Currently amended- Withdrawn) A method according to claim <u>263</u> wherein at least one compound of formula (I) is 8-hydroxyeremophila-1,11-dienone.
- 41. (Currently amended) A method according to claim <u>263</u> wherein the composition comprises an extract containing at least one compound of formula (I) obtained from a volatile oil bearing plant from the Myoporaceae family.
 - 42. (Canceled)
 - 43. (Canceled)
- 44. (**Currently amended**) A method according to claim <u>26</u>3 wherein the pest-controlling effective amount is a pesticidally effective amount.
- 45. (Currently amended) A method according to claim <u>263</u> wherein the pest-controlling effective amount is a pest-repelling effective amount.

- 46. (**Currently amended**) A method according to claim <u>263</u> wherein the pest-controlling effective amount is a antifeedant effective amount.
- 47. (Currently amended) A method according to claim <u>26</u>3 wherein the pests are selected from the group consisting of insects, arachnids, helminths and molluscs.
- 48. (Currently amended) A method according to claim <u>26</u>3 wherein the pests are selected from the group consisting of termites, earwigs, cockroaches and wood borer beetles and their larvae.
- 49. (Currently amended) A method according to claim <u>26</u>3 wherein the pests are wood associated pests.
- 50. (Currently amended) A method according to claim <u>4921</u> wherein the wood associated pests are selected from the group consisting of termites and wood borer beetles.
- 51. (Currently amended) A method according to claim <u>5022</u> wherein the wood associated pests are termites.
- 52. (Currently amended) A method according to claim <u>263</u> wherein pests are exposed to the pest-controlling effective amount of a compound of formula (I) or a composition comprising at least one compound of formula (I) by applying the compound or composition to a site of infestation, a potential site of infestation, a habitat of the pest or a potential habitat of the pest.
- 53. (Currently amended) A method according to claim <u>5224</u> wherein the compound or composition is applied to a surface or impregnated into a material or article of manufacture.
- 54. (Currently amended) A method according to claim <u>5325</u> wherein the compound or composition is applied to a surface by spraying, coating or painting the surface.
- 55. (Currently amended) A method according to claim <u>5426</u> wherein the surface is a soil surface, timber, buildings, wooden articles of manufacture or a physical barrier.
- 56. (Currently amended) A method according to claim <u>5527</u> wherein the material or article of manufacture is soil, timber, timber or wooden products or buildings or parts of buildings.
- 57. (Currently amended) A method according to claim <u>5224</u> wherein the compound or composition is applied in a band or furrow around a site of infestation or potential infestation or is mixed with a layer of soil at a site of infestation or a potential site of infestation.

58.-78. (Canceled)

79. (Currently amended) A method of combating an already existing wood associated pest infestation comprising applying at least one compound of formula (I) or a tautomer thereof or a composition comprising at least one compound of formula (I) or a tautomer thereof a composition according to claim 1 to a wood associated pest affected surface, wherein the compound of formula (I) is as defined in Claim 26.

80.-82. (Canceled)